

Claims

1. A method for synchronising image data obtained from process monitoring cameras, in which method
- 5 - different positions in the process are imaged using various cameras (1);
  - image data ( $2d_1 - 2d_n$ ) from the different camera positions is stored per camera into digital image processors (2);
  - images stored at the different camera positions are selected for display and analysis on the operator's computer (15) screen (11), and
  - 10 - from the image data ( $2d_1 - 2d_n$ ) obtained at the different camera positions are searched ( $2t, 2s_1 - 2s_3$ ) images depicting the same area in the web by using synchronisation means (12, 13, 14),

**characterised** in that for the operator is visualised a selection area (10) corresponding to the limited number of sequential images in the environment of the point of synchronisation (9, 9') of each camera position

2. A method for synchronising image data obtained from process monitoring cameras, in which method
- different positions in the process are imaged using various cameras (1);
  - 20 - image data ( $2d_1 - 2d_n$ ) from the different camera positions is stored per camera into digital image processors (2);
  - images stored at the different camera positions are selected for display and analysis on the operator's computer (15) screen (11); and
  - from the image data ( $2d_1 - 2d_n$ ) obtained at the different camera positions are
  - 25 searched ( $2t, 2s_1 - 2s_3$ ) images depicting the same area in the web by using synchronisation means (12, 13, 14),

**characterised** in that for the operator is visualised a selection area (10, 10') representing the limited number of sequential images, the image ( $2s_1 - 2s_3$ ) inside the said area being brought to the screen (11) by the synchronisation means when the image on the screen moves from one camera position to another, the size of the selection area (10), that is, the number of images contained by it, being dependent on the speed of the paper web being

monitored and the distances between the cameras.

a 3. A method as claimed in claim 1 or 2, characterised in that the process is paper manufacture and the object being monitored is the paper web running in the paper machine.

a 4. A method as claimed in <sup>claim 1</sup>any of the claims 1 to 3, characterised in that camera-specific image data is analysed and image variation data based on the level of variation in a plurality of sequential images is compiled, and the image variation graph (8) corresponding to the image variation data of images proceeding and following the image to be analysed is displayed on the screen (11).

a 5. A method as claimed in <sup>claim 1</sup>any of the claims 1 to 4, characterised in that the output levels of the image variation data of the different camera positions are standardised so as to be mutually comparable, the standardised image variation levels of the different camera positions are compared, and the image data (2d<sub>1</sub> - 2d<sub>n</sub>) of the camera position representing the highest-level variation is selected for automatic display.

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